Town of Milliken 2012 Drinking Water Consumer Confidence Report (CCR) For Calendar Year 2011

Public Water System ID: CO0162511

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact **Jason Fowler** Public Works Director at **970-660-5032** or **jfowler@town.milliken.co.us** with any questions about the Drinking Water Consumer Confidence Report or for public participation opportunities that may affect the water quality.

General Information

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting http://water.epa.gov/drink/contaminants. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- •Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- •Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- •Pesticides and herbicides, that may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.
- •Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.
- •Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

Our Water Source(s)

The Colorado Department of Public Health and Environment has provided us with a Source Water Assessment Report for our water supply. You may obtain a copy of the report by visiting http://www.cdphe.state.co.us/wq/sw/swapreports/swapreports.html, clicking on Weld County and selecting 162511; Town of Milliken or by contacting Jason Fowler Public Works Director at 970-660-5032 or jfowler@town.milliken.co.us. For general information about Source Water Assessment please visit http://www.cdphe.state.co.us/wq/sw/swaphom.html. Potential sources of contamination in our source water area come from:

The Source Water Assessment Report provides a screening-level evaluation of potential contamination that <u>could</u> occur. It <u>does not</u> mean that the contamination <u>has or will</u> occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan.

Please contact **Jason Fowler** Public Works Director at **970-660-5032** or **jfowler@town.milliken.co.us** to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Consumer Confidence Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

Our Water Source(s)

Source	Source Type	Water Type	Location
PURCHASED FROM CENTRAL WELD 162122 SW	Consecutive Connection	Surface Water	N/A
PURCHASED FROM GREELEY 162321 SW	Consecutive Connection	Surface Water	N/A
WELL NO 1R	Well	Groundwater	N/A
WELL NO 2R	Well	Groundwater	N/A

Terms and Abbreviations

- Maximum Contaminant Level Goal (MCLG) The 'Goal' is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- Maximum Contaminant Level (MCL) The 'Maximum Allowed' is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- Treatment Technique (TT) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL) The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum Residual Disinfectant Level Goal (MRDLG) The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- Maximum Residual Disinfectant Level (MRDL) The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- Average of Individual Samples (No Abbreviation) The typical value. Mathematically it is the sum of values divided by the number of samples.
- Range of Individual Samples (No Abbreviation) The lowest value to the highest value.
- Number of Samples (No Abbreviation) The number or count of values.
- Gross Alpha, Including RA, Excluding RN & U (No Abbreviation) This is the gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222 and uranium.
- Variance and Exemptions (V/E) Department permission not to meet an MCL or a treatment technique under certain conditions.
- Parts per million = Milligrams per liter (ppm = mg/L) One part per million corresponds to one minute in two years or a single penny in \$10,000.
- Parts per billion = Micrograms per liter (ppb = ug/L) One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- Parts per trillion = Nanograms per liter (ppt = nanograms/L) One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- Parts per quadrillion = Picograms per liter (ppq = picograms/L) One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000.
- Picocuries per liter (pCi/L) Picocuries per liter is a measure of the radioactivity in water.
- Nephelometric Turbidity Unit (NTU) Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- Not Applicable (N/A) Does Not Apply.
- Violation (No Abbreviation) A failure to meet a Colorado Primary Drinking Water Regulation.
- Formal Enforcement Action (No Abbreviation) An escalated action taken by the State (due to the number and/or severity of violations) to bring a non-compliant water system back into compliance by a certain time, with an enforceable consequence if the schedule is not met.

The Town of Milliken routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2011 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

Note: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section, that means that The Town of Milliken did not detect any contaminants in the last round of monitoring.

	Lead and Copper Sampled in the Distribution System												
Contaminant Name	Monitoring Period	90th Percentile	Number of Samples	Unit of Measure	Action Level	Sample Sites Above Action Level	Typical Sources						
COPPER	01/01/2011 to 12/31/2011	1.949	40	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits.						
LEAD	01/01/2011 to 12/31/2011	4	40	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits.						

	Disinfection By Products (TTHMs, HAA5, and Chlorite) Sampled in the Distribution System											
Contaminant Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Sources			
TOTAL HALOACETIC ACIDS (HAA5)	2011	27.528	11.86 - 39.27	4	ppb	60	N/A	No	By-product of drinking water disinfection.			
ТТНМ	2011	36.575	16.8 - 45	4	ppb	80	N/A	No	Byproduct of drinking water disinfection.			

		Regula	ted Contaminants Sar	npled at the	e Entry Poi	nt to the	Distribu	tion System	
Contaminant Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Sources
BARIUM	2010	0.005	0.005 - 0.005	1	ppm	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
CHROMIUM	2010	2.2	2.2 - 2.2	1	ppb	100	100	No	Discharge from steel and pulp mills; Erosion of natural deposits.
FLUORIDE	2010	0.24	0.24 - 0.24	1	ppm	4	4	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
NITRATE	2011	4.21	4.21 - 4.21	1	ррпі	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
SELENIUM	2010	3.7	3.7 - 3.7	1	ppb	50	50	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

	Radionuclide's Sampled at the Entry Point to the Distribution System											
Contaminant Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Sources			
COMBINED RADIUM (-226 & -228)	2009	0.1	0.1 - 0.1	1	pCi/L	5	0	No	Erosion of natural deposits.			
COMBINED URANIUM	2009	5.8	3.8 - 8.2	3	ppb	30	0	No	Erosion of natural deposits.			
GROSS ALPHA, EXCL. RADON & U	2009	0.633	0 - 1.4	3	pCi/L	15	0	No	Erosion of natural deposits.			
GROSS BETA PARTICLE ACTIVITY*	2009	0.2	0.2 - 0.2	1	pCi/L*	50	0	No	Decay of natural and man-made deposits.			

*The MCL for Gross Beta Particle Activity is 4 mrem/year. Since there is no simple conversion between mrem/year and pCi/L EPA considers 50 pCi/L to be the level of concern for Gross Beta Particle Activity.

	Secondary Contaminants**											
Contaminant Vear Average of Individual Range of Individual Samples Number of Samples (Lowest - Highest) Number of Samples Secondary Sta												
SODIUM	2010	42.2	42.2 - 42.2	1	ppm	N/A						
TDS	2009	276.667	160 - 392	3	ppm	500						

^{**}Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water. EPA recommends these standards but does not require water systems to comply.

Violation(s) and Formal Enforcement Action(s)

Violations

No Violations to Report

Formal Enforcement Actions

No Formal Enforcement Actions to Report

Greeley City 2012 Drinking Water Consumer Confidence Report (CCR) For Calendar Year 2011

Public Water System ID: CO0162321

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact Colleen Young at 970-350-9846, with any questions about the Drinking Water Consumer Confidence Report or for public participation opportunities that may affect the water quality.

General Information

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting http://water.epa.gov/drink/contaminants. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- •Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- •Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- •Pesticides and herbicides that may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.
- •Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.
- •Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

Greeley Drinking Water Sources

Greeley drinking water comes from surface water located in four river basins: Cache la Poudre River, Laramie River, Big Thompson river, and Colorado River. Greeley uses six high mountain reservoirs in the Poudre Basin (Barnes Meadow, Comanche, Hourglass, Peterson, Milton Seaman, and Twin Lake) to retain water from spring snowmelt for redistribution during the summer and fall when water demand is high. In addition, the City uses a plains reservoir system (Boyd Lake, Lake Loveland and Horseshoe Lake) to provide storage for summer demands. Greeley also owns a portion of the Colorado-Big Thompson (C-BT) and Windy Gap Projects. We store our portion from the C-BT Project in Lake Granby, Horsetooth Reservoir and Carter Lake and can deliver water to either the Poudre or Big Thompson basins to meet water demand.

Greeley treats water at the Bellvue Water Treatment Plant located northwest of Fort Collins; and at the Boyd Lake Water Treatment Plant in Loveland. Treated water is then piped to Greeley where it is distributed to customers or stored in one of three finished water reservoirs.

The Colorado Source Water Assessment and Protection (SWAP) Program encourages community-based protection and preventive management strategies to ensure that all drinking water resources are kept safe from future contamination. The SWAP Program has completed its assessment of Colorado's source waters however, a State report has not yet been completed for the Greeley Water Department. When Greeley's SWAP Report is finalized, it will be available by calling John Duggan, Colorado Department of Public Health and Environment, at 303-692-3534; or accessing the SWAP website at:

www.cdphe.state.co.us/wq/sw/swapreports/swapreports.html.

Greeley Drinking Water Sources

Source	Source Type	Water Type	Location
BOYD LAKE	Intake	Surface Water	To Boyd Lake WTP
CACHE LA POUDRE RIVER	Intake	Surface Water	To Bellvue WTP
HORSETOOTH RESERVOIR	Intake	Surface Water	To Bellvue WTP
LAKE LOVELAND	Intake	Surface Water	To Boyd Lake WTP

Terms and Abbreviations

- Action Level (AL) The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Average of Individual Samples (No Abbreviation) The typical value. Mathematically it is the sum of values divided by the number of samples.
- Formal Enforcement Action (No Abbreviation) An escalated action taken by the State (due to the number and/or severity of violations) to bring a non-compliant water system back into compliance by a certain time, with an enforceable consequence if the schedule is not met.
- Maximum Contaminant Level (MCL) The 'Maximum Allowed' is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- Maximum Contaminant Level Goal (MCLG) The 'Goal' is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- Nephelometric Turbidity Unit (NTU) Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- None Detected (ND) No contaminant was detected.
- Not Applicable (N/A) Does Not Apply.
- Number of Samples (No Abbreviation) The number or count of values.
- Parts per million = Milligrams per liter (ppm = mg/L) One part per million corresponds to one minute in two years or a single penny in \$10,000.
- Parts per billion = Micrograms per liter (ppb = ug/L) One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- Range of Individual Samples (No Abbreviation) The lowest value to the highest value.
- Treatment Technique (TT) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- Variance and Exemptions (V/E) Department permission not to meet an MCL or a treatment technique under certain conditions.
- Violation (No Abbreviation) A failure to meet a Colorado Primary Drinking Water Regulation.

Detected Contaminants

Greeley routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table shows all detections found in the period of January 1 to December 31, 2011, unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination.

Note: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section, that means that Greeley City Of did not detect any contaminants in the last round of monitoring.

	Disinfectants Sampled in the Distribution System											
Contaminant Name	Monitoring Period	Results	Number of Samples	TT Requirement	TT Violation?	Typical Sources						
CHLORINE	12/01/2011 to 12/31/2011	Lowest monthly percentage of samples meeting TT requirement: 98%		For any two consecutive months, At least 95% of samples (per month) must be greater than 0.001 ppm	No	Water additive used to control microbes.						

Microorganism Contaminants Sampled in the Distribution System											
Contaminant Name	Monitoring Period	Results	Number of Samples	MCL	MCLG	MCL Violation?	Typical Sources				
COLIFORM (TCR)	04/01/2011 to 04/30/2011	1.1% Positive Samples	94	No More Than 5.0% Positive Samples Per Period	0	No	Naturally present in the environment				

	Lead and Copper Sampled in the Distribution System											
Contaminant Name	Monitoring Period	90th Percentile	Number of Samples	Unit of Measure	Action Level	Sample Sites Above Action Level	Typical Sources					
COPPER	01/01/2011 to 12/31/2013	0.4	30	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits.					
LEAD	01/01/2011 to 12/31/2013	3	30	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits.					

	Disinfection By Products (TTHMs, HAA5, and Chlorite) Sampled in the Distribution System											
Contaminant Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Sources			
CHLORITE	2011	0.231	0.1 - 0.34	9	ppm	1	0.8	No	By-product of drinking water disinfection.			
TOTAL HALOACETIC ACIDS (HAA5)	2011	24.369	16 - 34.4	32	ppb	60	N/A	No	By-product of drinking water disinfection.			
ТТНМ	2011	40.881	20.4 - 57	32	ppb	80	N/A	No	Byproduct of drinking water disinfection.			

	Turbidity Sampled at the Entry Point to the Distribution System											
Contaminant Name	Sample Date	Level Found	TT Requirement	TT Violation?	Typical Sources							
TURBIDITY	Date:	Highest single measurement: 0.50 NTU	Maximum 1 NTU for any single measurement	No	Soil Runoff							
TURBIDITY	Month: December, 2011	Lowest monthly percentage of samples meeting TT requirement for our	In any month, at least 95% of samples must be	No	Soil Runoff							

			technology: 100)%	less than 0.	3 NTU		
Total	Organi	c Carbon (Disinfo	nfection By Products Precursor) Percentage Removal Ratio of Raw & Finished Water					
Contaminant Name	Year	Average of Individual Ratio	Range of Individual Ratio Samples	Number of Ratio	Unit of Measure	TT Minimum	TT Violation?	Typical Sources

1 otai	Organi	Carbon (Disinie	ction by Products Prect	irsor) Percenta	ige Kemova	i Ratio of Rav	v & Finished	water
Contaminant Name	Year	Average of Individual Ratio Samples	Range of Individual Ratio Samples (Lowest - Highest)	Number of Ratio Samples	Unit of Measure	TT Minimum Ratio	TT Violation?	Typical Sources
CARBON, TOTAL	2011	1.205	0.89 - 1.473	18	Ratio	The TT Minimum Level is a Ratio of 1	No	Naturally present in the environment.

	Regulated Contaminants Sampled at the Entry Point to the Distribution System									
Contaminant Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Sources	
BARIUM	2011	0.043	0.015 - 0.071	2	ppm	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	
FLUORIDE	2011	0.7	0.65 - 0.75	2	ppm	4	4	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.	
NITRATE	2011	<0.04	ND - <0.04	2	ppm	10	10	No	Erosion of natural deposits; fertilizer runoff	

	Secondary Contaminants**								
Contaminant Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	Secondary Standard			
SODIUM	2011	21.735	9.47 - 34	2	ppm	N/A			

^{**}Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water. EPA recommends these standards but does not require water systems to comply.

Violation(s) and Formal Enforcement Action(s)

Violations

No Violations to Report

Formal Enforcement Actions

No Formal Enforcement Actions to Report

PWSID CO 0162122

Central Weld County Water District 2012 Drinking Water Consumer Confidence Report for calendar year 2011

If you have any questions about this report or concerning your water utility, please contact Central Weld County Water District at 970-352-1284. We want our valued customers to be informed about their water utility, the service we provide and the quality water we deliver to you every day.

CUSTOMER SERVICE

Our regular office hours are from 8:00 am to Noon and 1:00 pm to 5:00 pm, Monday through Friday. If you have questions, please call us at (970) 352-1284. If you have problems after hours, please call and the answering service will take your message and contact the oncall employee in the case of an emergency. Our fax number is (970) 353-5865. Visit us on the web at www.cwcwd.com.

Please make sure the District has your current contact information on file in case of emergencies and/or shut down notifications.

Thank you.

DISTRICT STAFF

Our staff consists of: Mr. John Zadel. General Manager Mr. Mike Upchurch. Staff Engineer Mr. Stan Linker. **Operations Manager** Mr. Mac McClellan, Field Manager Mr. Dean Clarkin, Mr. Darin Naibauer, Mr. Noah Norman, Mr. Steve Maddox. **Certified Water Professionals** Mrs. Roxanne Garcia, Office Manager Mrs. Jodi Reed, **Customer Service/Billing**

The Board of Directors meet at 1:30pm on the third Thursday of each month. The Board is composed of the following members: Mr. James Miller (President) Mr. William Schaefer (Vice-president) Mr. James Park (Secretary/Treasurer) Mr. Albert Lind and Mr. Donald Meining

WATER SOURCE

We are pleased to present to you this year's Annual Water Quality Report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Our water comes from the west slope of the Colorado Rockies and is delivered through the Colorado Big Thompson Project and is filtered at the Carter Lake Treatment Plants. (PWSID CO-0135476)

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about

drinking water from their health care providers. More information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at 1-800-426-4791.or by visiting

http://water.epa.gov/drink/contaminants.

SOURCE WATER ASSESSMENT REPORT

The Colorado Department of Public Health and Environment has provided a Source Water Assessment Report for the Carter Lake Filter Plant water supply. You may obtain a copy of the report by visiting http://www.cdphe.state.co.us/wq/sw/swapreports/swapreports.html, clicking on Larimer County and

selecting 135476; Carter Lake. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that <u>could</u> occur. It <u>does not</u> mean that contamination <u>has or will</u> occur. Rather, this information is used to evaluate the need to improve

water treatment capabilities and to prepare for future contamination threats. This information is used to ensure that quality finished water is delivered to you. In addition, the source water assessment results provide a starting point from which a source water protection plan may be developed. In order to ensure that tap water is safe drink. the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations

establish limits for contaminants in bottled water that must provide the same protection for public health.

WATER CONSERVATION

Be advised that the District has adopted a "Water Shortage Contingency Plan". The plan is available for your review on the District's web site, at the District office, or upon request the District will mail it to you. A 50% allotment has been issued by NCWCD, for the 2012 water year. Leaks in toilets are the number one cause of water loss in the home. Remember that water conservation should be a priority in everyone's life as it is one of nature's treasures that is not always replaced on a consistent basis. Learn how to save water at http://www.epa.gov/watersense

METER MAINTENANCE & TAMPERING

PLEASE remember that a clearance of 3 ft. is required around meters, which means keeping obstructions and other impediments away from your meter. Never enclose your meter inside a dog run or locked fence. All meters should be free from overgrown vegetation.

All customers in the District may have control of their water by a shut-off valve. Meter and meter pits are not to be tampered with by the Customer. No unauthorized person shall maliciously, willfully or negligently break, damage, destroy, uncover, deface or tamper with any structures, appurtenances equipment which is a part of the District. No person shall uncover, make any connection with, or open into, use, alter or disturb any of the District's water lines without first obtaining a written permit from the It shall be District. unlawful for any person to tap the District's water line within the District without first having made a formal application to the District approval compliance.

The District's agents or other duly authorized employees shall be permitted to enter upon all properties for the purpose of inspection, observation, measurement, sampling and testing in accordance with the provisions of these Rules and Regulations.

Esta es informacion importante. Si no la pueden leer, necesitan que alguien se la traduzca.

Lead in Drinking Water

If present, elevated levels of lead cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Central Weld is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can

minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Infants and young children typically are more vulnerable to lead in drinking water than general the population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in

your home's water, you may wish to have your water tested. Additional information is available from the EPA Safe Drinking Water Hotline at 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

Contaminants in Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs. springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

<u>Microbial contaminants</u>, such as viruses and bacteria that may come from sewage treatment plants, septic systems, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, or mining.

<u>Pesticides and herbicides</u> that may come from a variety of sources, urban stormwater runoff, and residential uses.

Organic chemical contaminants, synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban stormwater runoff, and septic systems.

Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.

Detected Contaminant(s)

Central Weld County Water District routinely monitors for contaminants in your drinking water according to Federal and State laws. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report. This table shows the results of our monitoring for the period of January 1 to December 31, 2011; unless otherwise noted

NOTE: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section, that means that Central Weld County Water District did not detect any contaminants in the last round of monitoring.



	Microorganism Contaminants Sampled in the Distribution System									
Contaminant Name	Monitoring Period	Results	Number of Samples	MCL	MCLG	MCL Violation?	Typical Sources			
COLIFORM	7/1/11 to 7/31/11	2 positive samples	10	No More than 1 positive sample per period	0	Yes	Naturally present in the environment			
E.COLI	N/A to N/A	1 positive sample	N/A	A routine sample and a repeat sample are Total Coliform Positive and one is also Fecal Positive/E.Coli positive	0	No	Human and animal fecal waste			

Violation(s) and Formal Enforcement Action(s)

Formal Enforcement Actions - No Formal Enforcement Actions to Report

				Violations			
Type	Category	Analyte Name	Monitoring Period	Federal Period	Health Effects	Compliance Result	MCL or TT Level
MCL (TCR), ACUTE	Maximum Contaminant Level Violation	COLIFORM (TCR)	07/01/2011 to 07/31/2011	07/01/2011 to 07/31/2011	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.	N/A	N/A

Additional Violation Information: Central Weld County Water District resolved the violation by changing the sample location.

To help you understand the terms and abbreviations used in this report, we have provided the following definitions:

- Parts per million (ppm) or Milligrams per liter (mg/l): One part per million corresponds to one minute in two years or one penny in \$10,000.
- Parts per billion (ppb) or Micrograms per liter (μg/l): One part per billion corresponds to one minute in 2,000 years, or one penny in \$10,000,000.
- <u>Parts per trillion (ppt) or Nanograms per liter (ng/l):</u> One part per trillion corresponds to one minute in 2,000,000 years, or one penny in \$10,000,000,000.
- Parts per quadrillion (ppq) or Picograms per liter (pg/l): One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.
- Picocuries per Liter (pCI/I): A measure of radio activity in water.
- <u>Nephelometric Turbidity Unit (NTU):</u> Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of five NTU is just noticeable to the average person.
- Action Level (AL): The concentration of a contaminant, if exceeded, triggers treatment or other requirements a water system must follow.
- Treatment Technique (TT): A treatment technique is a required process intended to reduce the level of a contaminant in drinking water,
- <u>Maximum Contaminant Level Goal (MCLG):</u> The "goal" is the level of a contaminant in drinking water, below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- <u>Maximum Contaminant Level (MCL)</u>: The "maximum allowed" is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- <u>Maximum Residual Disinfectant Level Goal (MRDLG):</u> The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- <u>Maximum Residual Disinfectant Level (MRDL):</u> The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Compounds Regulated at the Treatment Plant

Contaminant	MCL	MCLG	CCR Unit	Level Detected	Violation Yes or No	Sample Date	Likely Source of Contamination
							Determined as no violation.
T. obtula.	TT ≤ 1.0	N/A	NTU	0.31	NO	1/2011	
Turbidity	TT <u><</u> 0.3	N/A	NTU	95%	NO	Continual	
Barium	2	2	ppm	0.015	NO	2/2/2011	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	4	4	ppm	0.85	NO	2/2/2011	Erosion of natural deposits, water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.

There are two standards for turbidity. The reported monthly turbidity must be less than or equal to 0.3 NTU at least 95% of the time. Also, turbidity must never be higher than 1.0 NTU at any time. The highest turbidity occurred in January 2011. Turbidity readings ranged from 0.01 – 0.31 NTU. Fluoride is added to help reduce tooth decay. In 2011, based on the recommendation from the Departments of Health & Human Services and the EPA, Carter Lake Filter Plant began reducing the level of fluoride to 0.7 ppm.

Compounds Regulated in the Distribution System

Contaminant	MCL	MCLG	CCR Units	Level Detected/ Range	Violation Yes or No	Sample Date	Likely Source of Contamination
Copper	AL= 1.3	1.3	ppm	0.21 Range 0.01-0.60	NO	2009	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	AL = 15	0	ppb	2.52 Range 0.22-8.76	NO	2009	Corrosion of household plumbing systems, erosion of natural deposits
ТТНМ	80	0	ppb	40.6Avg. Range 19.6-61.9	NO	Quarterly	By-product of drinking water chlorination
HAA5	60	N/A	ppb	50.0 Avg. Range 27.0-81.9	NO	Quarterly	By-product of drinking water chlorination

No single sample for Copper or Lead exceeded the Action Level. Single level detected is 90^{th} percentile: the range is for all samples. The District is required to sample the Copper and Lead every 3 years. The next samples will be collected in 2012 between June and September due to new regulations. TTHM – Total Trihalomethanes. Level detected is annual average: the range is for all samples. HAA – Haloacetic. Level detected is annual average; the range is for all samples.

Unregulated Compounds

Contaminant	Level Detected/Range	Likely Source of Contamination		
Chloroform	8.3 ppb	By-product of drinking water chlorination		
Bromodichloromethane	1.4 ppb	By-product of drinking water chlorination		
Sodium	6.1 ppm	Naturally occurring		
Methyl Tert-Butyl Ether (MTBE)	Not Tested	Underground storage tanks		

Unregulated compounds are those for which EPA has not established drinking water standards. The purpose of unregulated compound monitoring is to assist in drinking water and whether future regulation is warranted.

Important Information about Your Drinking Water

Date: May 3, 2012

To: Our Customers

From: The Central Weld County Water District,

Colorado Public Water System ID Number CO0162122

Our water treatment supplier, the Carter Lake Filter Plant, has notified us that they had a monitoring requirement not met in January of 2012 that resulted in Tier 3 monitoring violation.

Even though this was not an emergency, as our customers, you have a right to know what happened and what was done to correct the situation.

The treatment plant is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During January of 2012 we did not complete all monitoring or testing for turbidity (clarity) and chlorine residual and therefore cannot be sure of the quality of our drinking water during that time.

The filter plant is required to test and report the turbidity and chlorine content of our water every four hours, 24 hours a day, 7 days a week while the treatment plant is producing water. For the month of January the required number of samples to be monitored and reported was 186. The plant actually tested and reported 185 samples. Specifically, on January 11, 2012 the sample between 8:00 a.m. and 12:00 noon was missed.

What happened? On January 11, 2012 the plant was upgrading their control system software. During the upgrade the trending software was not active for a short period and one sample of turbidity and chlorine was missed. What is being done to prevent this from occurring again? Plant personnel will double check to make sure the control system has monitored the required number of samples. The results will be recorded and logged on the appropriate forms.

What should I do? There is nothing you need to do. No additional precautions by customers are necessary. Regular sampling resumed immediately for the next four hour period and continued without interruption. The samples taken immediately before and after the missed sample met drinking water standards.

For more information, please contact the Central Weld County Water District office at 970-352-1284.

Please share this information with all other people who drink this water, especially those who may not have received the public notification directly (for example, people in apartments, nursing home, schools and businesses). You can do this by posting this public notification in a public place or distributing copies by hand or mail.